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Notice of Allowability

Application No.

09/649,120

Examiner

Kristie Shingles

Applicant(s)

LAURENT ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/4/06.
2. ☒ The allowed claim(s) is/are 54, 57-62, 65-70, 73-78 and 81-92.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

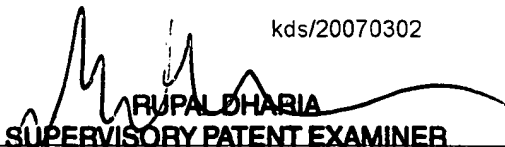
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>3/2007</u>. 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
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kds/20070302


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER

DETAILED ACTION

Response to Amendments

Claims 54, 62, 70, 78, 86, 88, 90 and 91 have been amended.

Claims 1-53, 55, 56, 63, 64, 71, 72, 79 and 80 have been cancelled.

Claims 54, 57-62, 65-70, 73-78 and 81-92 are pending.

Claims 54, 57-62, 65-70, 73-78 and 81-92 are allowed.

Response to Arguments

I. Applicant's arguments, see Remarks pages 12-16 filed 12/4/2006, with respect to claims 54, 62, 70 and 78 have been fully considered and are persuasive. The rejection of claims 54, 57-62, 65-70, 73-78 and 81-92 has been withdrawn.

Examiner's Amendment

II. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this Examiner's amendment was given in a telephone interview with Atty. Chris Tobin on 3/2/2007. The application has, therefore, been amended as follows:

- **Regarding claim 90**, in line 17-18, replace "apparatus of claim 68," with—
"apparatus of claim 70"—.

Claim 90 should now read:

"The apparatus of claim 70, wherein the first set of storage management properties includes a first class of service and the second set of storage management properties includes a second class of service, whereby access of the first and second volumes by the first and second hosts entails differing classes of service."

Reasons for Allowance

The following is the Examiner's statement of reasons for allowance

III. The prior art or record fails to teach neither singly nor in combination, the claimed limitation of “defining storage domains respectively having associated configurable storage management properties that are separate from individual physical capabilities of physical storage resources available through the SAN, wherein a first set of storage management properties is associated with a first storage domain and a second set of storage management properties is associated with a second storage domain, with the first set of storage management properties being different from the second set of storage management properties; accommodating the creation of logical volumes configurable for presentation to hosts through the SAN; and allocating the logical volumes to host in the context of the storage domains, wherein allocating a first logical volume to a first host in the context of the first storage domain entails the provision of storage resources according to the first set of storage management properties and allocating a second volume to a second host in the context of the second storage domain entails the provision of storage resources according to the second set of storage management properties” as stated in independent claims 54, 62, 70 and 78 (supported in Applicant's Disclosure on pages 7-9). These limitations, in conjunction with other limitations in the independent claims, are not specifically disclosed or remotely suggested in the prior art of record.

Specifically, the prior art fails to explicitly teach that the presentation of logical volumes to hosts accommodates storage resource access by hosts without requiring hosts to be configured according to the requirements of the physical storage resources, wherein the first logical volume and the second logical volume are created from physical storage resources in common. A review of claims 54, 62, 70 and 78 in view of the Examiner's arguments above and Applicant's remarks

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filed on 12/4/2006, indicate that claims 54, 57-62, 65-70, 73-78 and 81-92 are therefore allowable over the prior art of record.

Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

V. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Kristie Shingles whose telephone number is 571-272-3888. The Examiner can normally be reached on Monday-Friday 8:30-6:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie Shingles
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Art Unit 2141

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